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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,154	08/20/2004	Tilman B Walk	13195-00005-US	5709
23416	7590	06/15/2006	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ, LLP			NGUYEN, KIET TUAN	
P O BOX 2207			ART UNIT	PAPER NUMBER
WILMINGTON, DE 19899			2881	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/505,154

Applicant(s)

WALK ET AL.

Examiner

Kiet T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Objected Informalities

The disclosure is objected to because of the following informalities:

In The Specification

Applicant is requested to use the headings as indicated below to arrange the specification:

- 1) Title of the Invention.
- 2) Background of the Invention.
- 3) Summary of the Invention.
- 4) Brief Description of the Drawing(s) for **clearly showing 1-15 figures**.
- 5) Description of the Preferred Embodiment(s).

Rejection Under 35 U.S.C. 112, First Paragraph

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification is completely silent for describing at least one of embodiments that recites the limitations as claimed in part d) of claim 1 and part e) of claim 19. Therefore, the examiner don't understand what is the device that switches the acceleration voltage (DC voltage) applied to the quadrupole (II) to be on and/or off for analyzing ions with and/or without the acceleration voltage? What is the delay device that controls the quadrupole (II) to the quadrupole (III) analyzing individual ions with

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and/or without the acceleration voltage? Is there the mass spectrometer for analyzing ions with or without the acceleration voltage or combination of ions with and without the acceleration voltage?

Additional explanations are needed if applicant insists on including these features in the claims 1-20 without the insertion of new matter.

Clarification without the introduction of new matter is required.

Rejection Under 35 U.S.C. 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 9-11, 13, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanner et al. (6,140,638).

Claims 1, 6, 9-11, 13, and 16-18, as the best understood by the meaning of 112, 1st above, are rejected as:

Tanner et al. (6,140,638) discloses, in figs. 1-26, a triple quadrupole mass spectrometer apparatus. The apparatus includes mixtures of substances ionized before analysis by means of plasma which includes means for evaporating the mixture and ionizing in a gas phase (see col. 3, lines 55-60); a first quadrupole Q1 for selecting parent ions of interest; a second quadrupole Q2 applied with a DC voltage in a collision cell for fragmenting the parent ions (see col. 12, lines 33-37; a third quadrupole Q3 or TOF for selecting the fragmented ions (see col. 4, lines 25-38); and means for analyzing

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additional ions when the quadrupole Q2 in the collision cell has no acceleration voltage applied (see col. 5, lines 30-47 and col. 10, lines 1-1-10).

Rejection Under 35 U.S.C. 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-3, 7-8, 12, 14-15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanner et al. (6,140,638).

Tanner et al. (6,140,638) discloses all the features as discussed above except a chromatographic separation as recited in claims 2 and 14; an HPLC separation as recited in claim 3; an atomizing the mixture in an electrical field as recited in claim 7; the ions having the mass/charge between 1 and 100 as recited in claim 8; a high-throughput screening as recited in claim 12; and ionizing the mixture by desorbing the

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mixture on a surface or by atomizing the mixture in an electrical field as recited in claim 19.

Using the chromatographic separation or the HPLC separation is considered to be obvious variation in design, since it well known in the art to use the chromatographic separation or the HPLC separation for purifying the substances, thus would have been obvious to one skilled in the art to use the chromatographic separation or the HPLC separation in the Tanner et al. (6,140,638) apparatus for purifying the substances before analyzing the ions.

Atomizing the mixture in an electrical field or ionizing the mixture by desorbing the mixture on a surface is also considered to be obvious variation in design, since it well known in the art to use the atomizing the mixture in an electrical field or ionizing the mixture by desorbing the mixture on a surface for producing ions, thus would have been obvious to one skilled in the art to atomize or ionize the mixture for producing ions in the Tanner et al. (6,140,638) apparatus for analyzing the ions.

Analyzing the ions having the mass/charge between 1 and 100 is considered to be obvious variation in design, since it well known in the art to use the mass analyzer for selecting the mass/charge interest of ions to analyze the ions, thus would have been obvious to one skilled in the art to analyze the ions having the mass/charge between 1 and 100 in the Tanner et al. (6,140,638) apparatus for analyzing the ions.

Producing the high-throughput screening is considered to be obvious variation in design, since it well known in the art to use the mass spectrometer for analyzing ions and producing the high-throughput screening, thus would have been obvious to one

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skilled in the art to produce the high-throughput screening in the Tanner et al.

(6,140,638) apparatus for analyzing the ions.

Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Javahery et al. (6,093,929) discloses a triple quadrupole mass spectrometer having a collision cell applied with an acceleration voltage (DC voltage) to a quadrupole.

2) Crooke et al. (6,428,956) discloses a mass spectrometry for biomolecular screening.

3) Whitehouse et al. (7,034,292) discloses a triple quadrupole mass spectrometer having a collision cell applied with an acceleration voltage (DC voltage) to a quadrupole.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet T. Nguyen whose telephone number is 571-272-2479. The examiner can normally be reached on Monday-Friday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KN


KIET T. NGUYEN
PRIMARY EXAMINER